

FIGURE 1A

FIGURE 1B

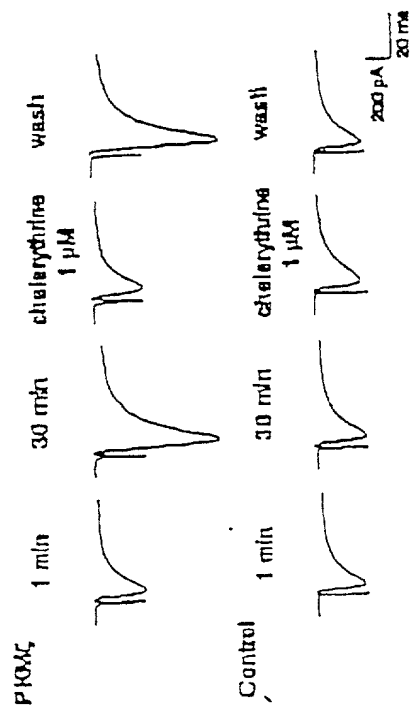


FIGURE 2A

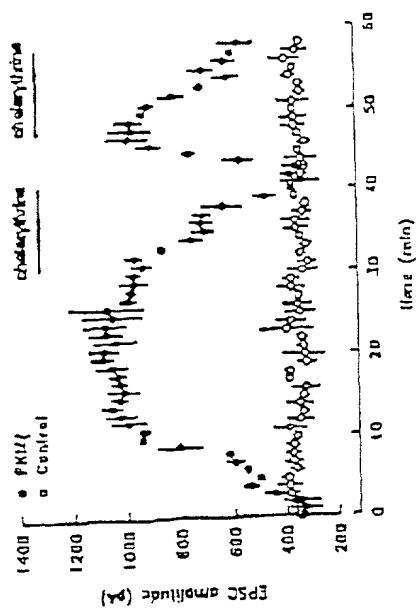


FIGURE 2B

100340 64050000

A

Silver Stain

kDa

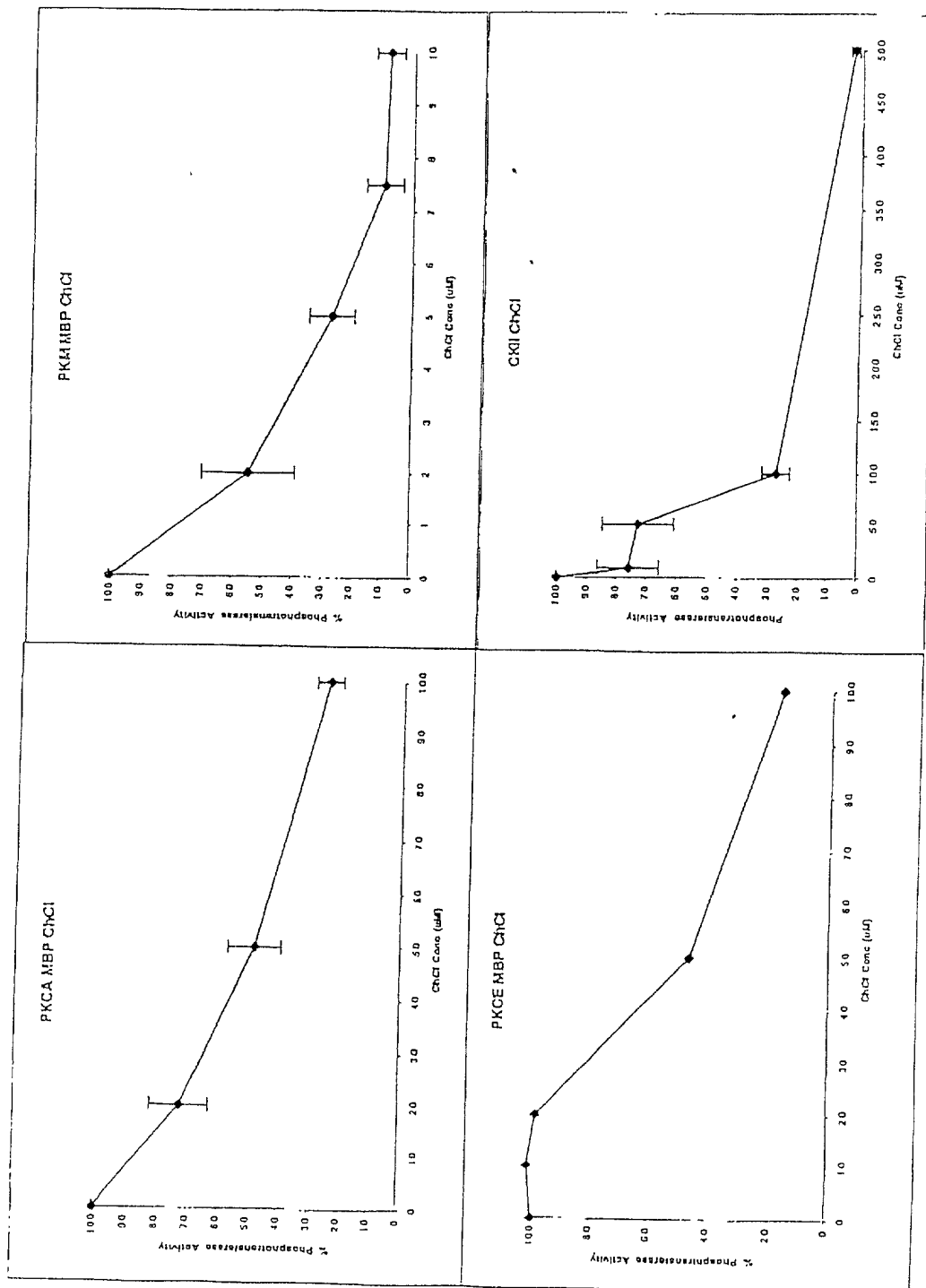
97-

66-

→ P10M

FIGURE 3

FIGURE 4



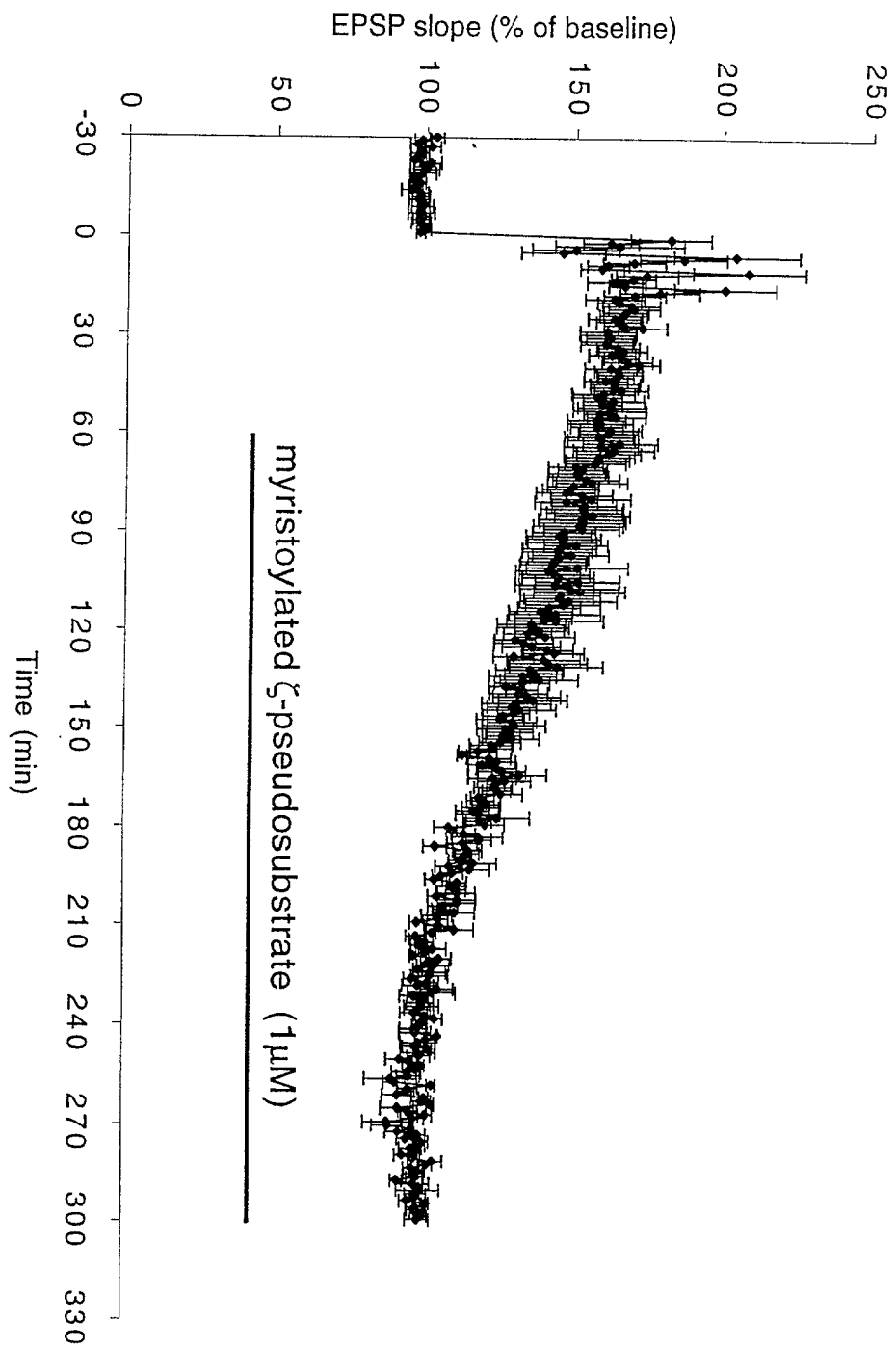


FIGURE 5

560 570 580 590 600
 GAAGCATGACAGCATTAAAGACGACTCGGAGGACCTTAAGCCAGTTATCG
 CTTTCGTACTGTCGTAATTTCTGCTGAGCCTCCTGGAATTCGGTCAATAGC
 K H D S I K D D S E D L K P V I>

610 620 630 640 650
 ATGGGATGGATGGAATCAAAATCTCTCAGGGGCTTGGGCTGCAGGACTTT
 TACCCTACCTACCTTAGTTTTAGAGAGTCCCCGAACCCGACGTCCTGAAA
 D G M D G I K I S Q G L G L Q D F>

660 670 680 690 700
 GACCTAATCAGAGTCATCGGGCGCGGGAGCTACGCCAAGGTTCTCCTGGT
 CTGGATTAGTCTCAGTAGCCCGCGCCCTCGATGCGGTTCCAAGAGGACCA
 D L I R V I G R G S Y A K V L L V>
 <--ATP-Binding Site----->

710 720 730 740 750
 CGGGTTGAAGAAGAATGACCAAATTTACGCCATGAAAGTGGTGAAGAAAG
 CGCCAACTTCTTCTTACTGGTTTAAATGCGGTACTTTCACCACTTCTTTC
 R L K K N D Q I Y A M K V V K K>
 -----ATP-Binding Site----->

760 770 780 790 800
 AGCTGGTGCATGATGACGAGGATATTGACTGGGTACAGACAGAGAAGCAC
 TCGACCACGTACTACTGCTCCTATAACTGACCCATGTCTGTCTCTTCGTG
 E L V H D D E D I D W V Q T E K H>

810 820 830 840 850
 GTGTTTGAGCAGGCATCCAGCAACCCCTTCTGGTTCGGATTACACTCCTG
 CACAACTCGTCCGTAGGTCGTTGGGGAAGGACCAGCCTAATGTGAGGAC
 V F E Q A S S N P F L V G L H S C>

860 870 880 890 900
 CTTCCAGACGACAAGTCGGTTGTTCTTGGTCATTGAGTACGTCAACGGCG
 GAAGGTCTGCTGTTTCAGCCAACAAGGACCAGTAACATGCAGTTGCCCGC
 F Q T T S R L F L V I E Y V N G>

910 920 930 940 950
 GGGACCTGATGTTCCACATGCAGAGGCAGAGGAAGCTCCCTGAGGAGCAC
 CCCTGGACTACAAGGTGTACGTCTCCGTCTCCTTCGAGGGACTCCTCGTG
 G D L M F H M Q R Q R K L P E E H>

960 970 980 990 1000
 GCCAGGTTCTACGCGGCCGAGATCTGCATCGCCCTCAACTTCCTGCACGA
 CGGTCCAAGATGCGCCGGCTCTAGACGTAGCGGGAGTTGAAGGACGTGCT
 A R F Y A A E I C I A L N F L H E>

FIGURE 6 (CONT'D)

000240" E/05E860

1010 1020 1030 1040 1050
GAGGGGGATCATCTACAGGGACCTGAAGCTGGACAACGTCCTCCTGGATG
CTCCCCCTAGTAGATGTCCCTGGACTTCGACCTGTTGCAGGAGGACCTAC
R G I I Y R D L K L D N V L L D>

1060 1070 1080 1090 1100
CGGACGGGCACATCAAGCTCACAGACTACGGCATGTGCAAGGAAGGCCTG
GCCTGCCCCGTGTAGTTCGAGTGTCTGATGCCGTACACGTTTCCTTCCGGAC
A D G H I K L T D Y G M C K E G L>

1110 1120 1130 1140 1150
GGCCCTGGTGACACAACGAGCACTTTCTGCGGAACCCCGAATTACATCGC
CCGGGACCACTGTGTTGCTCGTGAAAGACGCCTTGGGGCTTAATGTAGCG
G P G D T T S T F C G T P N Y I A>

1160 1170 1180 1190 1200
CCCCGAAATCCTGCGGGGAGAGGAGTACGGGTTTCAGCGTGGACTGGTGGG
GGGGCTTTTAGGACGCCCTCTCCTCATGCCCAAGTCGCACCTGACCACCC
P E I L R G E E Y G F S V D W W>

1210 1220 1230 1240 1250
CGCTGGGAGTCCTCATGTTTGAGATGATGGCCGGGCGCTCCCCGTTTCGAC
GCGACCTCAGGAGTACAACTCTACTACCGCCCCGCGAGGGGCAAGCTG
A L G V L M F E M M A G R S P F D>

1260 1270 1280 1290 1300
ATCATCACCGACAACCCGGACATGAACACAGAGGACTACCTTTTCCAAGT
TAGTAGTGGCTGTTGGGCCTGTACTTGTGTCTCCTGATGGAAAAGGTTCA
I I T D N P D M N T E D Y L F Q V>

1310 1320 1330 1340 1350
GATCCTGGAGAAGCCCATCCGGATCCCCCGGTTTCCTGTCCGTCAAAGCCT
CTAGGACCTCTTCGGGTAGGCCTAGGGGGCCAAGGACAGGCAGTTTCGGA
I L E K P I R I P R F L S V K A>

1360 1370 1380 1390 1400
CCCATGTTTTTAAAGGATTTTTTAAATAAGGACCCCCAAAGAGAGGCTCGGC
GGGTACAAAATTTTCCTAAAAATTTATTCTGCGGTTTCTCTCCGAGCCG
S H V L K G F L N K D P K E R L G>

1410 1420 1430 1440 1450
TGCCGGCCACAGACTGGATTTTCTGACATCAAGTCCCACGCGTTCTTCCG
ACGGCCCGGTGTCTGACCTAAAAGACTGTAGTTCAGGGTGCGCAAGAAGGC
C R P Q T G F S D I K S H A F F R>

FIGURE 6 (CONT'D)

0903073.04001

1460 1470 1480 1490 1500
CAGCATAGACTGGGACTTGCTGGAGAAGAAGCAGGCGCTCCCTCCATTCC
GTCGTATCTGACCCTGAACGACCTCTTCTTCGTCCGCGAGGGAGGTAAGG
S I D W D L L E K K Q A L P P F>

1510 1520 1530 1540 1550
AGCCACAGATCACAGACGACTACGGTCTGGACAACTTTGACACACAGTTC
TCGGTGTCTAGTGTCTGCTGATGCCAGACCTGTTGAAACTGTGTGTCAAG
Q P Q I T D D Y G L D N F D T Q F>

1560 1570 1580 1590 1600
ACCAGCGAGCCCGTGCAGCTGACCCAGACGATGAGGATGCCATAAAGAG
TGGTCGCTCGGGCACGTGCGACTGGGGTCTGCTACTCCTACGGTATTTCTC
T S E P V Q L T P D D E D A I K R>

1610 1620 1630 1640 1650
GATCGACCAGTCAGAGTTCTGAAGGCTTTGAGTATATCAACCCATTATTGC
CTAGCTGGTCAGTCTCAAGCTTCCGAAACTCATATAGTTGGGTAATAACG
I D Q S E F E G F E Y I N P L L>

1660 1670 1680 1690 1700
TGTCCACCGAGGAGTCGGTGTGAGGCCGCGTGCGTCTCTGTCGTGGACAC
ACAGGTGGCTCCTCAGCCACACTCCGGCGCACGCAGAGACAGCACCTGTG
L S T E E S V>
----- C-terminus -->

1710 1720 1730 1740 1750
GCGTGATTGACCCTTTAACTGTATCCTTAACCACCGCATATGCATGCCAG
CGCACTAACTGGGAAATTGACATAGGAATTGGTGGCGTATACGTACGGTC

1760 1770 1780 1790 1800
GCTGGGCACGGCTCCGAGGGCGGCCAGGGACAGACGCTTGCGCCGAGACC
CGACCCGTGCCGAGGCTCCCGCCGGTCCCTGTCTGCGAACGCGGCTCTGG

1810 1820 1830 1840 1850
GCAGAGGGAAGCGTCAGCGGGCGCTGCTGGGAGCAGAACAGTCCCTCACA
CGTCTCCCTTCGCAGTCGCCCCGCGACGACCCTCGTCTTGTCAGGGAGTGT

1860 1870 1880 1890 1900
CCTGGCCCCGGCAGGCAGCTTCGTGCTGGAGGAACTTGCTGCTGTGCCTGC
GGACCGGGCCGTCCGTCTGAAGCACGACCTCCTTGAACGACGACACGGACG

1910 1920 1930 1940 1950
GTCGCGGCGGATCCGCGGGGACCCTGCCGAGGGGGCTGTTCATGCGGTTTC
CAGCGCCCGCCTAGGCGCCCCCTGGGACGGCTCCCCCGACAGTACGCCAAG

FIGURE 6 (CONT'D)

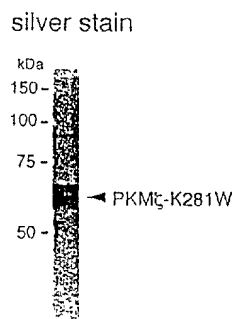
1960 1970 1980 1990 2000
CAAGGTGCACATTTTCCACGGAAACAGAACTCGATGCACTGACCTGCTCC
GTTCCACGTGTAAAAGGTGCCTTTGTCTTGAGCTACGTGACTGGACGAGG

2010 2020 2030 2040 2050
GCCAGGAAAGTGAGCGTGTAGCGTCCTGAGGAATAAAATGTTCCGATGAA
CGGTCCTTTCACCTCGCACATCGCAGGACTCCTTATTTTACAAGGCTACTT

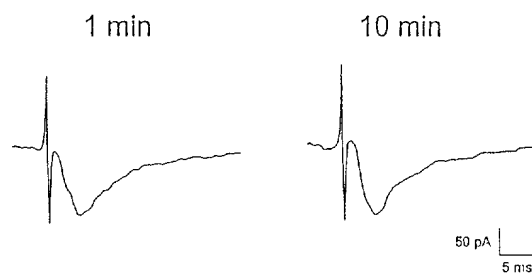
AAAAAAAA
TTTTTTTT

FIGURE 6 (CONT'D)

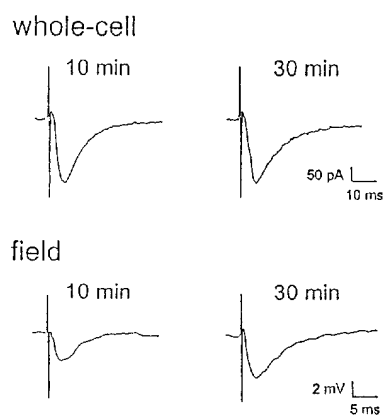
A



B



C



D

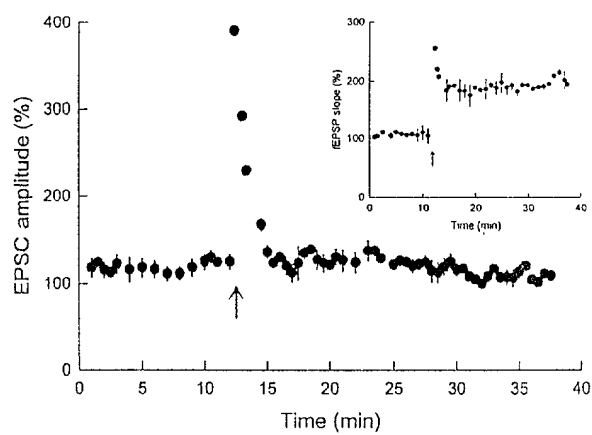


FIGURE 7